New Hampshire Strategic Watershed Action Teams (SWATs)

Agreement Quarterly Status Report

Spring April 30, 2012

New Hampshire Fish and Game- is developing highly visible wildlife habitat demonstration sites with the Southeast Land Trust so that private landowners can see what various habitat management techniques look like. In addition this work was filmed for TV and will air on local broadcast networks.

The creation of early successional habitat was conducted with a "brontosaurus" (picture below) and part of this work was funded through NRCS programs. In a few short years the property will have habitat that could be used by New England cottontails, woodcock, ruffed grouse, and eastern towhee. The video is currently being edited for release this summer and will be used as an outreach tool to educate landowners on how this equipment creates early successional habitat and what their property will look like after completion. In addition to the video, a story was written about Southeast Land Trust's use of NRCS funds to create wildlife habitat. This article was published in the winter edition of "Taking Action for Wildlife" e-newsletter that reaches over 2,000 people.

Also NH Fish and Game is working on developing protocol for turtle nesting sites for Blanding's and Wood Turtle two declining species in the state. These areas will help keep these turtles who spend much of their time in the upland forest places to nest away from roads and development.



Above: creating early successional habitat which supports over 50 declining wildlife species in New England.



Above: A recently created turtle nesting area, specifically for Wood Turtles, in partnership with NHFG and USFWS, NRCS is installing these in critical habitats around the state.

Wildlife Management Institute- is currently working to install several early successional habitat contracts throughout the state. Several NRCS customers are benefiting from their expert advice and where needed WMI is offering matching dollars for customers to help install larger scale habitat improvements. Also WMI is a member of the New England Cottontail Private Lands Management Team, and Dr. Steve Fuller helps identify key areas to restore. In a recent site visit where over 50 acres of habitat will be created in occupied NEC habitat, we discovered a brook which is impacted from concentrated flow from cropland and will be restored by adding woody material to the brook. This will help divert higher flows back on the to the floodplain and attenuate sediments. This stream flows into Great Bay which is an impaired waterbody and reducing sediment is a priority. Additional woody material on the floodplain will also help create NEC habitat, reduce flood velocities and this disturbance will also help perpetuate NEC habitat.



Above: Dr.Steve Fuller of WMI inspects an brooke which has suffered from concentrated flow from agriculture in some prime New England Cottontail habitat.

Trout Unlimited- The first quarter of 2012 has been active for continuing outreach efforts to Trout Unlimited (TU) Chapter Members, the general public and private landowners. Time has also been spent developing working relationships with state and federal regional stakeholder organizations to build a network where potential aquatic restoration projects on private lands could be directed to our team.

Some of the key activities over the last three months are:

- 1. Working with the Great Bay TU Chapter (seacoast NH) on developing a wood installation project as part of a larger culvert restoration on the Thompson Brook in the Winnicut River watershed. Also met with the Winnicut Watershed Coalition to present opportunities on potential outreach to their members during association activities.
- Attended the NRCS State Technical Committee meeting in Concord, NH to reach out to
 other agencies exploring ideas on how to develop contacts to facilitate communications
 with landowner organizations.
- 3. Participated in the NH River Herring Workshop at the University of New Hampshire to network with other participants involved with aquatic restoration and explore the possibilities of collaboration on private lands.
- 4. Met with Cheshire County NRCS staff Wendy Ward (Soil Conservation Technician), Steven Pytlik (District Conservationist) and Artie McCollum (Silvio Conte) to review

and prioritize project areas within the Ashuelot River watershed. This collaboration will result in approach landowners surrounding existing and proposed restoration sites.

- 5. Completed a public outreach / restoration presentation at Tin Mountain Conservation Center in Conway, NH with Carroll County NRCS staff Debra Eddison (Soil Conservationist) and Nels Liljedahl (District Conservationist). Focused on wood additions to streams on private lands.
- 6. Spoke to the Merrimack TU Chapter at their annual chapter banquet about opportunities to develop projects on their, and associates, land to continue active conservation efforts across the Chapter's region.
- 7. Attended NH Water Conference in Plymouth, NH to network with statewide peers on developing potential projects on lands within their jurisdictions.

Key upcoming activities in May:

- 1. Site visit with forester on a private 12,000 acre conserved piece of land in Stoddard, NH known as Pitcher Mountain.
- 2. Conducting a wood loading seminar at a NH Timberland Owners Association workshop in Laconia, NH.
- 3. Meeting with the TU Ammonoosuc Chapter to review potential restoration opportunities in the Israel River watershed.
- 4. Will be conducting outreach presentations at the Harris Center in Hancock, NH and for the Lake Sunapee Protective Association in Sunapee, NH.

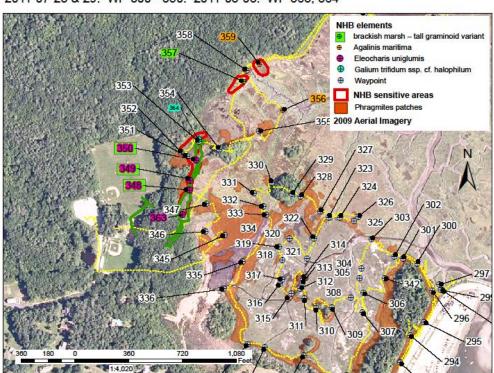
The Nature Conservancy- TNC is working in the Great Bay and Salmon Falls watershed to improve water quality and wildlife habitat through land conservation, improved land management and planning, and oyster restoration. In addition, TNC continues to work with an invasive species partnership on the strategic planning and removal of invasive species. Of note this past quarter was the Conservancy's outreach and discussion of NRCS programs with landowner seeking to permanently conserve their land that is within a New England Cottontail priority area. In addition, NRCS programs were discussed with a local farm owner looking to expand production for the local food market. The landowner seems most interested in the FRPP program.

In cooperation with the Silvio O. Conte National Fish and Wildlife Refuge (USFWS) and NRCS TNC is working on conservation planning on floodplain forests in the Upper Connecticut River. Many of these floodplain systems are at risk from bank erosion and invasive plants. Several declining species require this habitat type and these floodplain forests are in constant conflict with agricultural use and development. As part of this work, the Conservancy reached out to a farmer experiencing bank erosion along the Connecticut River and discussed the NRCS programs available to him to conserve his land and to fund floodplain restoration.

NRCS and the NH Natural Heritage Bureau

2011 Invasive Species Control in Four Salt Marshes in Rye, NH

In 2011, the NH Natural Heritage Bureau (NHB) collaborated with NRCS on an invasive species control project in four salt marshes in Rye, NH (Awcomin, Brackett Road, Marsh Road, and Fairhill Marshes). The target of NRCS's control efforts is common reed (*Phragmites australis*), a non-native plant that grows rapidly and densely, excluding native plants that are more useful to wildlife. Common reed has only taken over patches of the four marshes, making this a good time for NRCS control measures. However, rare native plants and healthy estuarine wetland plant communities are growing near the common reed patches, where they could be damaged by the invasives control activities. A botanist from NHB visited all four sites, determining the extent of rare plant populations, including whether American reed (*Phragmites americanus*) was present, a rare native plant that can be easily mistaken for the non-native and invasive common reed. The field data were mapped on aerial photographs to guide the common reed control efforts.



2011-07-28 & 29: WP 300 - 350. 2011-08-03: WP 363, 364

Figure 1. Survey results from the southern half of Awcomin Marsh, Rye, NH. Numbers are waypoints collected by the NHB botanist, while NHB Elements include the names of exemplary natural communities and rare plants growing in the marsh.

Thanks to the collaboration between NRCS, NHB, and the contractors working in the marshes, invasives control was accomplished without unnecessary harm to several rare native plants and exemplary

natural communities. As an added benefit, two plant species were found that were previously not known to occur in the state, bunch-flowered soft rush (*Juncus conglomeratus*) and salt marsh three-petaled bedstraw (*Galium trifidum* ssp. *halophilum*), improving our understanding of New Hampshire's biodiversity.

New Hampshire Strategic Watershed Action Teams (SWATs) Agreement Quarterly Status Report Winter 2012

Background:

NH has 6 funded agreements under the SWAT funding which are 50/50 contribution agreements.

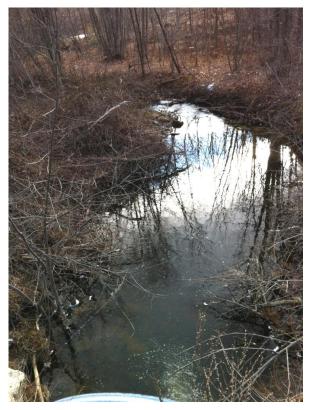
Trout Unlimited-A non-profit group focused on several key watersheds in New Hampshire looking to improve stream connectivity and habitat by culvert replacement, dam removal, riparian buffer plantings, and in-stream wood additions. Several first and second order cold water streams are within forestry operations in NH and most streams will benefit from restoration activities.

Trout Unlimited (TU) is presently conducting outreach efforts to TU Chapters across New Hampshire. Three formal presentations have been made to member groups with three additional meetings scheduled for spring. Discussions focus mainly on highlighting NRCS programs and how they might help TU members, restore streams on their property.

Three site walks, with member landowners, have lead to on-the-ground work scheduled for the summer 2012 field season in Pierce Brook (Acworth, NH), Thompson Brook (Greenland, NH), and Ferry Brooke (Keene, NH). Restoration projects include wood loading and habitat enhancement in both locations. Additional site visits are scheduled for sites on the Ashuelot River (Keene, NH) as well as Indian Stream (Pittsburg, NH).

TU has participated in multiple workshops and project reviews hosted by NRCS. These all have led to ongoing collaborations with both NRCS staff and other stakeholder organizations. TU is scheduled to do a joint presentation to landowners in the southern White Mountain region in late February. TU is also

working with a shared biologist position for the Silvio Conte Wildlife Refuge and prioritizing several culverts for replacement on private lands, as part of a survey conducted by TNC and TU a few years back.



Above: a section of Thompson Brook, with a perched culvert in the foreground. This stream also suffers from sedimentation and lacks in-stream wood. TU is working with 5 private landowners to restore a significant section of the brook. This particular stretch of stream is important for Sea Run Brook Trout, which are in decline in NH. Without this agreement in place NRCS would not have the resources needed develop this type of project.

Society for the Protection of New Hampshire Forests (SPNHF)- The largest land trust in New Hampshire holds easements on 95,000 acres of private forest land in New Hampshire. Every three years members of their easement monitoring team walk the easement to determine if landowners are complying with the deed restrictions. At the conclusion of the site walk, foresters from SPNHF are providing landowners with some recommendations about forest stewardship and also providing information about the NRCS Forestry Initiative. Several forestry sign-ups in key focus areas are resulting due to this agreement and several of these landowners live in remote areas of the state and are difficult to reach with other outreach techniques. Furthermore, in these remote areas where several large un-fragmented blocks of forestland remain, NRCS is making a valuable contribution to improving forest composition and improving wildlife habitat. The SPNHF staff will resume this work in the summer of 2012.



Above: an example a recent application to the NY/NE Forestry Initiative showing an eroding skid trail on forest land within the Quabbin to Cardigan focus area. This gully erosion is over 500 feet long directly contributes tons of sediment to a key tributary to the Merrimack River, which is of great concern due to its rapidly declining water quality. This particular piece of property is 1800 acres and the landowner was unaware of this problem on a remote part of the property. This application also includes 200 acres of Forest Stand Improvement and replacement of a key crossing which was destroyed in a flood.

New Hampshire Natural Heritage Bureau (NHB)- This agreement provides NH NRCS access to rare plant and wildlife data across the state in addition to consultation from state specialists in botany and wildlife. This agreement helps soils conservationists in the field everyday as they use GIS and various confidential data sets to improve planning and educated private forest landowners about their landscape. By using data from the initial site visit, planners are able to incorporate information about rare wildlife and plant communities which saves time and improves conservation delivery. Over 20 days of consultation have already occurred.

An example of a recent application to the NY/NE forestry initiative involves a 100 acre parcel containing an abandon gravel pit which is important habitat for the Black Racer. This particular conservation plan will directly benefit this species and several others by planting warm season grasses on the eroding sandy areas, developing young forest and removing several poor quality white pines. In addition, NHB provides NRCS staff with plant ID training, performs Natural Community mapping at a site specific scale. This agreement has also greatly benefited the New England Cottontail, Blanding's and Wood Turtle by

knowing they are present in the landscape and adjusting management activities accordingly.



Above: an area which will be restored for the black racer by developing a xeric community including, warm season grasses, pitch pine, and young forest. The plan will also control invasive plants such as Autumn Olive.

Wildlife Management Institute (WMI)- Is working with NRCS to develop early successional habitat plans within the Upper Ammonoosuc Watershed for American Woodcock and in the New England Cottontail focus areas in the southern area of the state. In addition to providing private landowners with expert planning and advice, WMI controls several private sources of funding which are available for some projects as match. Having WMI at the table has greatly increased landowner appeal for NRCS programs because several landowners are worried if they can afford the match. The reassurance that WMI will support their project has built confidence with several key landowners which otherwise may not have applied to the NY/NE Forestry Initiative. For example, a 40 acre landlocked piece which is prime for New England Cottontail needed to have a private forester negotiate a right-of-way and also pay for the forest access on a adjacent commercial site which was not eligible for NRCS programs. Without this agreement in-place this key contract would not have been possible. WMI is also providing key outreach to the forestry community and helping them understand the importance of including wildlife habitat in their

forest management plans.



Above: a completed 5 acre early successional management area planned by WMI which was planned in wet aspen-birch habitat to improve dense cover for woodcock and several other declining shrubland birds. For this project WMI helped the landowner identify the area in the field, helps the landowner secure bids from the private sector and contributes match where needed to the project.

The New Hampshire Chapter of the Nature Conservancy (TNC)- In cooperation with the Silvio Conte Wildlife Refuge, the USFWS, NRCS, and TNC are working on conservation planning on riparian forests in the Upper Connecticut River. Several of these areas are at risk from bank erosion and invasive plants. Several declining species require this habitat type and these forests are in constant conflict with agricultural use and development. Several key landowners have been contacted and TNC is still early in discussions with several landowners about potential conservation practices funded by NRCS.

TNC is also working with Great Bay and the Salmon Falls Watershed to improve water quality through forest management planning, oyster restoration, and culvert replacement. TNC also remains committed to the early detection of invasive plants and has directed several forest landowners to NRCS for potential funding.

New Hampshire Fish and Game (NHFG) – is currently working on a website for private landowners to better understand how they can manage habitat for declining wildlife on their property. The website will also link with the NH NRCS website to highlight opportunities for private landowners to achieve various forestry and wildlife goals with NRCS practices. NHFG biologists are also working with land trusts and at other outreach events to describe the forestry initiative, offer site walks and develop conservation plans. In addition, NHFG biologists are helping private landowners implement funded conservation plans, by helping landowners secure bids from the private sector and showing landowners where and how to do the work.

NHFG is currently working with the Monadnock Conservancy to improve structure in the forest by creating early successional patch cuts to improve forest structure for interior forest birds. This is a key project because several other private landowners and conservation agencies will use this as a demonstration area where tours and educational events will occur.